

Application No. 10/574,847
Art Unit: 1791

Amendment
Attorney Docket No. 062289

AMENDMENTS TO THE DRAWINGS

The attached replacement sheets of drawings include changes to Figs. 2, 4, 5 and 6.

REMARKS

Claims 1-4 are pending in the present application. Claims 1 and 2 are rejected. Claims 1 and 2 are herein amended. New claims 5-7 are added herein. No new matter has been added. Applicants thank the Examiner for the courtesies extended in the telephone interview of February 3, 2010. Applicants' Statement of the Substance of the Interview is incorporated herein.

Amendments to the Drawings

Applicants herein attach replacement drawing sheets corresponding to Figures 2, 4, 5 and 6. These drawings correct an obvious error in the original drawings. In particular, these make clear that the face of strip material A visible in the figures strung around roller 32 (base sheet S) is not cut. Rather, the dotted line indicates that the face of strip material A which is not visible is cut (film FL). In this circular area, the dicing tape T was cut by the pre-cutting means and then removed by the peeling means. In the original Figures 2, 4, 5 and 6, in the part upstream of the peel plate 26, the film FL is the nearest layer to the viewer and the base sheet S is behind it. However, after peel plate 26, the strip material A "doubles back" such that the base sheet S is the nearest layer to the viewer and the remaining part of film FL (what is left of it) is behind it. Thus, the circular cut in the film FL is not visible in these figures when the strip material A is fed through rollers 31 and 32. Therefore, in order to correct this error, the circular cut L in this area is modified to be a dotted line instead of a solid line. No new matter has been added.

Applicant's Response to Claim Rejections under 35 U.S.C. §112

Claims 1 and 2 are rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement.

It is the position of the Office Action that there is no support in the specification as filed for the phrase “supporting means in accordance with the size of the ring frame.” In response, Applicants herein delete this phrase for improved clarity. Thus, this rejection is moot.

Claims 1 and 2 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claims the subject matter which applicant regards as the invention.

It is the position of the Office Action that the phrase “supporting means in accordance with the size of the ring frame” is unclear. In response, Applicants herein delete this phrase for improved clarity. Thus, this rejection is moot.

Applicants' Response to Claim Rejections under 35 U.S.C. §103

Claim 1 is rejected under 35 U.S.C. §103(a) as being unpatentable over Okada (WO00/15354, as evidenced by U.S. Patent No. 6,500,291), in view of Tsujimoto (U.S. Patent No. 5,961,768).

It is the position of the Office Action that Okada discloses the embodiment as claimed, with the exception of teaching a peeling plate. The Office Action relies on Tsujimoto to provide this teaching.

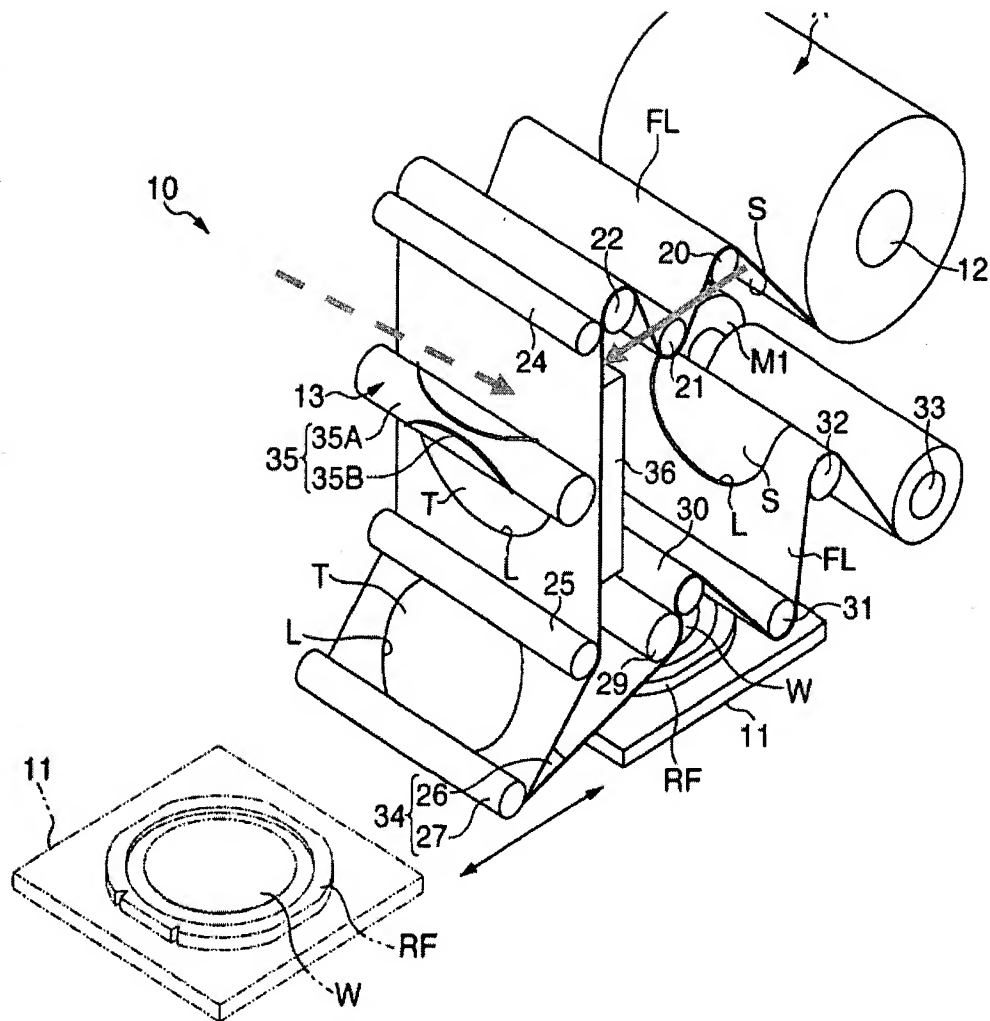
Okada is directed at a device and method for lamination. Okada discloses a film feed part 2 having a three-layer film 1 made up of base film *m*, resist layer *e* and cover film *f*. The laminate film 1 passes through inter-substrate processing part 3, where resist layer *e* and cover film *f* are cut as in Figure 3. Then, the laminate film 1 is transported through a series of rollers until it reaches peeling guide 5. At this point, the cover film *f* is removed, leaving only the base film *m* and resist layer *e*. See, for example, Figure 4. Then, the remaining parts of the laminate film are fed to the rollers 9 and 10, which press the cut resist layer *e* onto substrate *k*. See, for example, Figures 5 and 8.

In response to the pending rejection, Applicants herein amend the claims in order to further clarify the structure of the claimed apparatus. Claim 1 as amended recites that the pre-cutting means is "configured such that the cut is made from a face of said film opposite the face of said film which is to be peeled from the base sheet by said peeling means." Additionally, claim 1 is amended to recite that "said press roller is configured to press the pre-cut portion of said film on the face of said film opposite the face of said film peeled from the base sheet by said peeling means." Thus, the claims require that the press roller and the pre-cutting means both contact the same side of the film.

Applicants respectfully submit that this is supported at least by Figures 1, 2, 4, 5 and 6 and various passages in the specification which will be discussed in greater detail below. As a preliminary comment, Applicants note that it is well established in case law that claim terms need not be explicitly used in the specification *in haec verba* in order to satisfy the written description requirement of 35 U.S.C. §112, first paragraph. *In re Lukach*, 442 F.2d 967, 969,

169 USPQ 795 (CCPA 1971). Rather, the specification must instead “convey clearly to those skilled in the art, to who it is addressed, in any way, the information that the applicant has invented the specific subject matter later claimed.” *In re Wertheim*, 541 F.2d 257, 262, 191 USPQ 90, 97 (CCPA 1976), *appeal after remand*, 646 F.2d 527, 209 USPQ 554 (CCPA 1981). Additionally, the Court of Appeals for the Federal Circuit has confirmed that “*ipsis verbis* disclosure is not necessary to satisfy the written description requirement of section 112. Instead, the disclosure need only reasonably convey to persons skilled in the art that the inventor had possession of the subject matter in question.” *Fujikawa v. Wattanasin*, 93 F.3d 1559, 1570, 39 USPQ2d 1895, 1904 (Fed. Cir. 1996).

However, in order to aid in demonstration that the recited features are fully supported by the specification, Applicants first provide a marked-up version of original Figure 2 on the following page.



the film FL, which is called the dicing tape T, is then adhered to a substrate by the press roller 27. The press roller 27 presses on the face of the pre-cut portion of film FL which is opposite to the face of the film which was peeled from the base sheet S. Thus, the die roller 35 and the press roller 27 both contact the same side of film FL. See also paragraphs [0010], [0011], [0014] and [0015]. In the examples in the specification, this substrate is a ring frame RF of a semiconductor wafer W. Due to this configuration, the risk of dust catching on the adhesive face of the pre-cut part of the film FL when it is peeled from the base sheet S is eliminated. Thus, dust will not be trapped between the dicing tape and the semiconductor wafer. Accordingly, the amended claims require that the cutting part of the pre-cutting means and the press roller are disposed on the opposite side of the strip material as the peeling means.

On the other hand, Okada does not disclose this configuration. The material used in Okada is a three-layer film having base film *m*, resist layer *e* and cover film *f*. As illustrated in Figure 3 of Okada, the cutters B cut the resist layer *e* from the side of the resist layer *e* which adheres to cover film *f*. As illustrated in Figure 4, the cover film *f* is later peeled from the resist layer *e* by peeling guide 5. The resist layer *e* is then pressed against substrate *k* on the face which was previously adhered to cover film *f*. Thus, the cutters B cut the resist layer *e* from the face of the resist layer *e* which is the same as the face of resist layer *e* which is to be peeled from cover film *f* by the peeling guide 5. Furthermore, the lamination roll 9 presses the base film *m* and resist layer *e* on a side thereof which is opposite the side where the cover film *f* was peeled from the resist layer *e*. Thus, the cutters B and the peel guide 5 are disposed on the opposite side of the three-layer film as the lamination roll 9. Therefore, Applicants respectfully submit that

Okada does not disclose the pre-cut means, peeling means, and press roller as claimed. Additionally, Applicants respectfully submit that Tsujimoto does not make up for this deficiency of Okada. Therefore, Applicants respectfully submit that the combination of Tsujimoto does not disclose or suggest the embodiments as claimed.

Furthermore, Applicants provide the following additional comments. First, Applicants respectfully note that although the claims must be structurally distinct from the cited art in order to be patentable, it is improper to ignore the language following the word “for” in the claims as an intended use. In order to anticipate the claimed elements, a cited element must be an “equivalent” of the claimed means-plus-function element. Thus, the cited art element must perform the identical function specified in the claim in substantially the same way and must produce substantially the same results. Please see MPEP 2183.

Additionally, Applicants herein revise the claims to recite “a peeling means” as originally recited instead of a “peeling plate.” As such, the recited “peeling means” includes both a peeling plate and a peeling roller.

Claim 2 is rejected under 35 U.S.C. §103(a) as being unpatentable over Okada in view of Tsujimoto further in view of Murphy (U.S. Patent No. 5,730,816).

It is the position of the Office Action that the combination of Okada and Tsujimoto discloses the embodiment as claimed, with the exception of teaching the first and second sensors for detecting a raised portion and lowered portion of the dancer roller. The Office Action relies on Murphy to provide this teaching.

In response, Applicants respectfully submit that claim 2 is patentable at least due to its dependency on claim 1, which Applicants submit it patentable for at least the reasons discussed above. Favorable reconsideration is respectfully requested.

New Claims

Additionally, Applicants herein add new claims 5-7. These claims recite specific embodiments of the pre-cutting means. These new claims are supported at least by Figures 2, 5 and 6, and the corresponding text in the specification. No new matter has been added. Favorable consideration is respectfully requested.

For at least the foregoing reasons, the claimed invention distinguishes over the cited art and defines patentable subject matter. Favorable reconsideration is earnestly solicited.

If the Examiner deems that any further action by applicants would be desirable to place the application in condition for allowance, the Examiner is encouraged to telephone applicants' undersigned attorney.

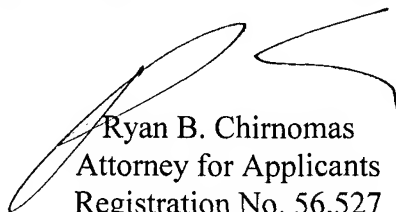
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If this paper is not timely filed, Applicants respectfully petition for an appropriate extension of time. The fees for such an extension or any other fees that may be due with respect to this paper may be charged to Deposit Account No. 50-2866.

Respectfully submitted,

WESTERMAN, HATTORI, DANIELS & ADRIAN, LLP

A handwritten signature in black ink, appearing to read "Ryan B. Chirnomas", is written over the printed name and title.

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Enclosures: Replacement Drawing Sheets corresponding to Figures 2, 4, 5 and 6